

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A thermally zoned substrate holder, comprising:  
a base having top and bottom surfaces, the top surface configured to support a substrate;

a plurality of temperature control elements inside the base, each element having a top surface and a bottom surface;

at least one substantially solid and thermally insulating material insulator, having a lower coefficient of thermal conductivity than a material of the base, the at least one insulator being disposed between the plurality of temperature control elements and substantially thermally separating the plurality of temperature control elements.

Claim 2 (Original): The apparatus according to claim 1, wherein first and second of the plurality of temperature control elements receive separate fluid flows.

Claim 3 (Original): The apparatus according to claim 2, wherein at least one of the fluid flows is substantially circular in the plane of the top surface of the substrate holder.

Claim 4 (Original): The apparatus according to claim 2, wherein the fluid flows are concentric about a central axis of the substrate holder.

Claim 5 (Original): The apparatus according to claim 2, wherein the at least one insulator is concentric with the fluid flows.

Claim 6 (Original): The apparatus according to claim 1, wherein the plurality of temperature control elements each include at least one heating element.

Claim 7 (Original): The apparatus according to Claim 6, wherein each heating element is concentric about a central axis of the substrate holder.

Claim 8 (Original): The apparatus according to Claim 7, wherein the at least one insulator is concentric with each heating element.

Claim 9 (Original): The apparatus according to claim 1, further comprising temperature detectors disposed at predetermined positions in the temperature control elements.

Claim 10 (Original): The apparatus according to claim 2, further comprising temperature detectors disposed at predetermined positions in the temperature control elements.

Claim 11 (Original): The apparatus according to claim 1, wherein the temperature control elements are radially extending.

Claim 12 (Original): The apparatus according to claim 1, wherein the temperature control elements comprise radially extending elements and azimuthally extending elements.

Claim 13 (Previously Presented): The apparatus according to claim 15, wherein the gas-filled chamber comprises a reflective surface.

Claim 14 (Previously Presented): The apparatus according to claim 15, wherein the gas-filled chamber comprises a vacuum-filled chamber.

Claim 15 (Previously Presented): A thermally zoned substrate holder, comprising:  
a base having top and bottom surfaces, the top surface configured to support a substrate;

a plurality of temperature controlled passages inside the base, each passage having a top surface and a bottom surface;

a gas filled chamber extending within approximately 1 mm of said top and bottom surfaces and, having a lower coefficient of thermal conductivity than a material of the base, for substantially thermally separating the plurality of temperature controlled passages, the chamber being disposed between the plurality of temperature controlled passages.

Claim 16 (Previously Presented): The apparatus according to claim 1, wherein said at least one insulator extends within approximately 1 mm of said top and bottom surface.

Claim 17 (Previously Presented): The apparatus according to claim 16, wherein said at least one insulator has a cross-sectional width of approximately 2 mm.

Claim 18 (Previously Presented): The apparatus according to claim 16, wherein said at least one insulator comprises a reflective surface.

Claim 19 (Previously Presented): The apparatus of claim 15, wherein said chamber has a cross-sectional width of approximately 2 mm.

Claim 20 (Previously Presented): The apparatus of claim 15, wherein said chamber comprises support material different from said base.